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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,816	11/19/2003	John T. Apostolos	D-4568D	7197

7590 02/23/2006
Robert K. Tandler, Esq.
65 Atlantic Avenue
Boston, MA 02110

EXAMINER

ALSOMIRI, ISAM A

ART UNIT	PAPER NUMBER
3662	

3662

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson et al. US 2001/0006372 in view of Arnaud et al. US 4,743,110 or Collins US 4,005,417.

Referring to claim 1, Lemelson discloses in figures 1-2, a surveillance method, comprising the steps of: deploying a battery [34]-powered unit 20 having a spectrum analyzer (inherent for at least processing Radar/Ladar signals), a signal source recognition unit coupled to an analyzer and a transmitter for transmitting the results of the signal source recognition unit to a remote location (other units, see Abstract); and, receiving the transmittal signal at the remote location and providing an indication of the presence of a signal source such that the presence of an identifiable signal source can be made known (see Abstract, figures 3-4 see pages 2-4). Lemelson does not specifically teach the claimed a spectrum analyzer that outputs a series of spectral lines, the position and amplitude of which characterize the identity of a received signal from a signal source. However, spectrum analyzers are well known and are used for all types of signal recognition and identifications/processing signals. Both Arnaud and Collins teach spectrum analyzers in Radar systems where the spectrum analyzer

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determines the wanted signal (see Arnaud col. 4 lines 42-57; and Collins col. 2 lines 24-68). It would have been obvious to modify Lemelson to include a spectrum analyzer to analyzer all the signals and better determine the signal identity.

Referring to claim 2, Lemelson teaches including in the deployed unit a direction finding system for ascertaining the direction of an incoming signal from the signal source and for transmitting the direction of the incoming signal to the remote location (see figures 3 and 4 [68]).

Referring to claim 3, Lemelson teaches including in the deployed unit a geophysical location detection system 45 for determining the location of the deployed unit and for transmitting the determined location to the remote location, with transmissions from a number of deployed units permitting determination of the location of the signal source the signal of which is recognized by the signal source recognition unit (see figure 2).

Referring to claim 4, Lemelson teaches including in the deployed unit a direction finding system for ascertaining the direction of an incoming signal and a geophysical location detection system for ascertaining the location of the deployed unit, and, coupling the outputs of the direction finding system and the geographical location detection system to the transmitter, whereby with reports from a number of deployed units the location of the source of the incoming signal can be ascertained by triangulation (see figures 2-4 [45] [36] [68], pages 2-4).

Referring to claim 5, Lemelson does not teach the claimed a single dual chirp generator and both a first dispersive delay line and a second dispersive delay line, with

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the two different chirps from the dual chirp generator matched to the respective delay lines, whereby power consumption is limited through the use of a single chirp generator thus to maximize the longevity of the battery powered unit deployed. Arnaud teaches the use of the claimed signal dual chirp generator having first and second dispersive delay lines (see figure 1 [13 and 14], col. 4 lines 42-57). Collins teaches the use of dual chirp generator having first and second dispersive delay lines (see col. 2 lines 24-68). It would have been obvious to modify Lemelson's system to include the dual chirp generator of Arnaud's or Collins' for better sensitivity and detection the received signal and battery life of the system.

Response to Arguments

Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claim 5 and the Arnaud et al. reference, applicant argues that "nowhere in this reference is chirping shown, much less first and second dispersive delay lines". However, Arnaud teaches in col. 4 lines 42-57 "In accordance with the invention, the transmission means comprise a local oscillator 10 and a pulse generator 11 for alternately switching the output of the oscillator via a switching circuit 12 to a first dispersive delay line 13, then to a second delay line 14, the respective slopes of which are +K and -K" "The slope indicated represents a linear frequency variation (Chirp function) which is respectively increasing and decreasing". Therefore, the rejection is maintained.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isam Alsomiri whose telephone number is 571-272-6970. The examiner can normally be reached on Monday-Friday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



THOMAS H. TARCZA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

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Isam Alsomiri

A handwritten signature in black ink, appearing to be 'Isam Alsomiri', written in a cursive style.

February 15, 2006